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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,940	04/02/2004	Hiroshi Terazawa	TERA3002/FJD	8949

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EXAMINER

PATEL, VISHAL A

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,940

Applicant(s)

TERAZAWA, HIROSHI

Examiner

Vishal Patel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-9 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Newly submitted claim 8 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 8 is directed to a different species than the one elected by the applicant, applicant has not claimed a labyrinth portion with an L-shaped section in any of the claims 1-4 originally filed.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 8 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 5, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsue et al (US. 4,516,783).

The reference of Mitsue clearly discloses every feature claimed by applicant, see figure 5), a first annular case (30) having a cylindrical portion (cylindrical portion on surface 54) and a first vertical wall (32b), a second annular case (40) having a cylindrical portion (portion on 102) and a second vertical wall (42b), an annular seal member on the second annular case having an axial lip (lip that contacts surface 32b) on the second case that contact the first case vertical wall

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(32b) and a radial lip (lip 48) that directly contact one of a stationary or rotary members of a bearing unit (surface 54 is either a stationary or rotary member surface, figure 5) and a bearing unit (bearing unit similar shown in figure 2) having stationary and rotary members (104 and 102). There is a gap between the end of 32c and end of the fitting cylindrical portion of the second annular cast that is on 102. The radial lip inclining further away from the first vertical wall than its leg portion (the radial lip 48 is inclined further away from the first vertical wall than its leg portion).

Regarding limitations: The first annular case and the second annular case are respectively and separately fitted in either of the stationary member and the rotatable member and the other of the stationary member and the rotatable member, in advance, respectively, before they are incorporated into the bearing unit (this limitations is considered to be intended use or method limitations and is given little patentable weight). Furthermore the annular cases of Mitsue are capable of being mounted to either of the stationary and the rotatable members and then assembled into a bearing unit.

4. Claims 5-7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohtsuki et al (US. 6,637,754).

Ohtsuki discloses a bearing unit (figure 28-29) having a stationary member and a rotary member (rings 1 and 2), a seal having a first annular case (11), a second annular case (12), both cases having a fitting cylindrical portion and a vertical wall extending therefrom, an annular seal member on the second case (seal formed by two axial lips 16a and 16b2, where lip 16a contacts the vertical wall), the seal is disposed in the bearing unit, the first annular case is on either the stationary or rotary members and the second annular case is on either the other of the stationary

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or rotary members and the seal having a second axial lip (lip 16b2). A radial lip (16b1) inclining further away from the first vertical wall than its leg portion (the radial lip 16b1 is inclined further away from the first vertical wall than its leg portion).

For courtesy the limitations of claim is disclosed by Ohtsuki (figure 28). A gap exist between the stationary member or rotary member, an end of the fitting cylindrical portion of the second annular case and an end of the vertical wall of the first fitting member (L-shape gap near the numeral 17), the gap constitutes a labyrinth portion with an L-shape section.

Regarding limitations: The first annular case and the second annular case are respectively and separately fitted in either of the stationary member and the rotatable member and the other of the stationary member and the rotatable member, in advance, respectively, before they are incorporated into the bearing unit (this limitations is considered to be intended use or method limitations and is given little patentable weight). Furthermore the annular cases of Ohtsuki are capable of being mounted to either of the stationary and the rotatable members and then assembled into a bearing unit.

5. Claims 5-7 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by AAPA (figure 5 or 6).

AAPA figures 5 and 6 disclose all the limitations of the claims 5-7 and further that the annular cases are mounted on respective stationary and rotary members of a bearing unit.

Regarding limitations: The first annular case and the second annular case are respectively and separately fitted in either of the stationary member and the rotatable member and the other of the stationary member and the rotatable member, in advance, respectively, before they are incorporated into the bearing unit (this limitations is considered to be intended use or method

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limitations and is given little patentable weight). Furthermore the annular cases of AAPA are capable of being mounted to either of the stationary and the rotatable members and then assembled into a bearing unit.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Mitsue.

AAPA discloses the invention substantially as claimed above but fails to disclose that the radial lip directly sealingly engages the outer circumferential wall of the stationary member or the rotatable member. Mitsue discloses to have seal where a radial lip (lip 48) directly contacts one of a stationary member and a rotatable member (figure 5) or as shown in figure 6, a radial lip (48) contacts an annular case member instead of the stationary member or the rotatable member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the seal of AAPA to have the annular case to have a shorter fitting cylindrical portion so that the radial lip directly contacts one of the rotatable and stationary members as taught by Mitsue, since having a radial lip contact an annular case or directly contact one of the stationary and rotatable members is considered to be art equivalent.

Response to Arguments

8. Applicant's arguments filed 11/15/06 have been fully considered but they are not persuasive.

Applicants' argument that Mitsue does not teach an annular seal member is clearly not true because as stated in the rejection the reference of Mitsue teaches an annular seal member having lips.

Applicants' argument that Ohtsuki fails to disclose that the first annular case...bearing unit is not persuasive because as stated in the rejection that a method limitations is given little patentable weight in an apparatus, specially if all structural limitations are taught by the reference. This reasoning applies to all the prior art used in the rejection above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP
November 22, 2006

A handwritten signature in black ink, appearing to read "Vishal Patel", with a stylized flourish at the end.

Vishal Patel
Primary Examiner
Tech. Center 3600